



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2022-0397; Project Identifier MCAI-2021-01354-A; Amendment 39-22151; AD 2022-17-13]

RIN 2120-AA64

Airworthiness Directives; Piaggio Aero Industries S.p.A Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Piaggio Aero Industries S.p.A. (Piaggio) Model P-180 airplanes. This AD is prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI identifies the unsafe condition as altimetry system errors in the air data computers (ADCs) and stand-by instrument systems. This AD requires amending the existing airplane flight manual (AFM), installing improved ADCs and a detachable configuration module (DCM), and revising the existing instructions for continued airworthiness. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Piaggio Aero Industries S.p.A., P180 Customer Support, via Pionieri e Aviatori d'Italia, snc - 16154 Genoa, Italy; phone: (+39) 331 679 74 93; email: technicalsupport@piaggioaerospace.it. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the

availability of this material at the FAA, call (817) 222-5110. It is also available at www.regulations.gov by searching for and locating Docket No. FAA-2022-0397.

Examining the AD Docket

You may examine the AD docket at www.regulations.gov by searching for and locating Docket No. FAA-2022-0397; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the MCAI, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Mike Kiesov, Aviation Safety Engineer, General Aviation & Rotorcraft Section, International Validation Branch, FAA, 901 Locust, Room 301, Kansas City, MO 64106; phone: (816) 329-4144; email: mike.kiesov@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain serial-numbered Piaggio Model P-180 airplanes. The NPRM published in the *Federal Register* on April 8, 2022 (87 FR 20790). The NPRM was prompted by MCAI originated by the European Union Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union. EASA issued EASA AD 2019-0269, dated October 29, 2019 (referred to after this as “the MCAI”), to address the unsafe condition on Piaggio Model P.180 Avanti II airplanes. The MCAI states:

During monitoring of P.180 Avanti II fleet by EUROCONTROL (checks performed by Air Traffic Control stations) a mean altimetry system error and some singular measurement exceedances were reported being outside of limits defined by rules applicable to Reduced Vertical Separation Minimum (RVSM) airworthiness standards. Subsequent investigation determined that the static source error correction curves embedded in the ADC

of pilot and co-pilot, as well as in the stand-by instrument system, did not ensure the required RVSM performance of the aeroplane.

This condition, if not corrected, could lead to delivery [of] erroneous air data information and consequent impairment of aeroplane altitude-keeping capability, possibly resulting in a mid-air collision within RVSM airspace.

To address this potential unsafe condition, Piaggio issued the AFM TC [Temporary Change No. 107] introducing additional limitations for operation within RVSM airspace and issued the SB [Piaggio Aerospace Service Bulletin 80-0467] providing instructions to modify the aeroplane.

For the reasons described above, this [EASA] AD requires amendment of the AFM and modification of the aeroplane by installing improved ADCs and DCM.

You may examine the MCAI in the AD docket at www.regulations.gov by searching for and locating Docket No. FAA-2022-0397.

In the NPRM, the FAA proposed to require amending the existing AFM, installing improved ADCs and a DCM, and revising the existing instructions for continued airworthiness. The FAA is issuing this AD to prevent a mean altimetry system error measurement from exceeding the limits defined for operations within airspace designed as RVSM airspace. The unsafe condition, if not addressed, could result in a potential mid-air collision within RVSM airspace.

Discussion of Final Airworthiness Directive

Comments

The FAA received a comment from Piaggio. The following presents the comment received on the NPRM and the FAA's response to the comment.

Request to Update Obsolete Contact Information for Piaggio

Piaggio requested that the FAA revise the NPRM to update their contact information for service information.

The FAA agrees and has updated the contact information for Piaggio accordingly.

Conclusion

This product has been approved by the aviation authority of another country and is approved for operation in the United States. Pursuant to the FAA's bilateral agreement

with this State of Design Authority, it has notified the FAA of the unsafe condition described in the MCAI and service information referenced above. The FAA reviewed the relevant data, considered the comment received, and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on this product. Except for the changes described previously, this AD is adopted as proposed in the NPRM. None of the changes will increase the economic burden on any operator.

Related Service Information under 1 CFR Part 51

The FAA reviewed Piaggio Aero Industries S.p.A. A.S. Service Bulletin No. 80-0467, Revision 2, dated March 6, 2020, which specifies procedures for replacing the two ADCs and the DCM with improved parts.

The FAA also reviewed Piaggio Aviation P.180 Avanti II/EVO Temporary Change No. 107, dated September 17, 2019, which updates the limitations section of the AFM by prohibiting operations in RVSM airspace if the ADCs and DCM have not been replaced.

In addition, the FAA reviewed Piaggio Aviation P.180 Avanti EVO Maintenance Manual Temporary Revision No. 126, dated June 6, 2019, which updates and adds certain tasks for the navigation system.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Differences Between this AD and the MCAI

The MCAI requires informing all flight crews of the AFM revision and operating accordingly thereafter, and this AD does not because those actions are already required by FAA operating regulations.

Costs of Compliance

The FAA estimates that this AD will affect 101 airplanes of U.S. registry.

The FAA estimates the following costs to comply with this AD:

Estimated costs

Action	Labor Cost	Parts Cost	Cost per airplane	Cost on U.S. operators
Revise AFM	1 work-hour x \$85 per hour = \$85	Not Applicable	\$85	\$8,585
Update AFM	1 work-hour x \$85 per hour = \$85	Not Applicable	\$85	\$8,585
Replace two ADCs and one DCM	16 work-hours x \$85 per hour = \$1,360	\$21,900	\$23,260	\$2,349,260

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2022-17-13 Piaggio Aero Industries S.p.A.: Amendment 39-22151; Docket No. FAA-2022-0397; Project Identifier MCAI-2021-01354-A.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Piaggio Aero Industries S.p.A. Model P-180 airplanes, serial number (S/N) 1002 and S/Ns 1105 through 3010 inclusive, certificated in any category.

(d) Subject

Joint Aircraft System Component (JASC) Code 3417, Air Data Computer.

(e) Unsafe Condition

This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI identifies the unsafe condition as altimetry system errors in the air data computers (ADCs) and stand-by instrument systems. The FAA is issuing this AD to prevent a mean altimetry system error measurement from exceeding the limits defined for operations within airspace designed

as reduced vertical separation minimum (RVSM) airspace. The unsafe condition, if not addressed, could result in a potential mid-air collision within RVSM airspace.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Actions

(1) Within 24 months after the effective date of this AD, revise the Limitations section of the existing airplane flight manual (AFM) for your airplane by adding the information in Piaggio Aviation P.180 Avanti II/EVO Temporary Change No. 107, dated September 17, 2019. Using a different document with language identical to that on page 2-33-bis or 2-33.C-bis (as applicable to the S/N of your airplane) of Piaggio Aviation P.180 Avanti II/EVO Temporary Change No. 107, dated September 17, 2019, is acceptable for compliance with this requirement.

(2) Within 660 hours time-in-service after the effective date of this AD or 24 months after the effective date of this AD, whichever occurs first, modify the airplane by replacing the ADCs and detachable configuration module (DCM) in accordance with the Accomplishment Instructions, paragraphs (5) through (14), of Piaggio Aero Industries S.p.A. A.S. Service Bulletin No. 80-0467, Revision 2, dated March 6, 2020, and revise the instructions for continued airworthiness for your airplane by incorporating the information in Piaggio Aviation P.180 Avanti EVO Maintenance Manual Temporary Revision No. 126, dated June 6, 2019.

(3) The AFM revision required by paragraph (g)(1) of this AD, if included, may be removed after completing the actions required by paragraph (g)(2) of this AD.

(4) As of the effective date of this AD, do not install on any airplane an ADC part number (P/N) 822-1109-018, DCM P/N 501-1870-31, or DCM P/N 501-1870-51.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the

manager of the certification office, send it to the attention of the person identified in paragraph (i)(1) of this AD and email to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(i) Related Information

(1) For more information about this AD, contact Mike Kiesov, Aviation Safety Engineer, General Aviation & Rotorcraft Section, International Validation Branch, FAA, 901 Locust, Room 301, Kansas City, MO 64106; phone: (816) 329-4144; email: mike.kiesov@faa.gov.

(2) Refer to MCAI European Union Aviation Safety Agency (EASA) AD 2019-0269, dated October 29, 2019, for related information. You may examine the EASA AD at www.regulations.gov by searching for and locating Docket No. FAA-2022-0397.

(j) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Piaggio Aero Industries S.p.A. A.S. Service Bulletin No. 80-0467, Revision 2, dated March 6, 2020.

(ii) Piaggio Aviation P.180 Avanti EVO Maintenance Manual Temporary Revision No. 126, dated June 6, 2019.

(iii) Piaggio Aviation P.180 Avanti II/EVO Temporary Change No. 107, dated September 17, 2019.

(3) For service information identified in this AD, contact Piaggio Aero Industries S.p.A., P180 Customer Support, via Pionieri e Aviatori d'Italia, snc - 16154 Genoa, Italy; phone: (+39) 331 679 74 93; email: technicalsupport@piaggioaerospace.it.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email: fr.inspection@nara.gov, or go to: www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on August 12, 2022.

Gaetano A. Sciortino, Deputy Director for Strategic Initiatives,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2022-19055 Filed: 9/2/2022 8:45 am; Publication Date: 9/6/2022]